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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,637	09/15/2003	Eadaoin Ledwidge	ICC-279	8008
31217	7590	09/01/2006	EXAMINER	
LOCTITE CORPORATION 1001 TROUT BROOK CROSSING ROCKY HILL, CT 06067			SELLERS, ROBERT E	
			ART UNIT	PAPER NUMBER
			1712	

DATE MAILED: 09/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/661,637	LEDWIDGE, EADAOIN	
	Examiner Robert Sellers	Art Unit 1712	

**– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –**  
**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### **Status**

1) Responsive to communication(s) filed on 22 August 2006.

2a) This action is **FINAL**.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### **Disposition of Claims**

4) Claim(s) 1-23 and 25 is/are pending in the application.

4a) Of the above claim(s) 21-23 and 25 is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-20 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### **Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### **Priority under 35 U.S.C. § 119**

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### **Attachment(s)**

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____ .

This application contains claims 21-23 drawn to inventions nonelected with traverse in the reply filed February 15, 2005. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144 and MPEP § 821.01).

Claim 25 amended to define a method of applying a composition is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

1. Claims 1-20 and claim 25 are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown:
  - (1) The process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product. See MPEP § 806.05(h). In the instant case, the product as claimed can be used in a materially different process of using that product such as a method of molding an article.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 25 is withdrawn from consideration as being directed to a non-elected invention (37 CFR 1.142(b) and MPEP § 821.03).

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2. The 35 U.S.C. 112, first paragraph rejection has been overcome by the deletion of the monoglycidyl compounds from claim 7 in the amendment filed August 22, 2006. The 35 U.S.C. 112, second paragraph is rescinded due to the amendment of claim 25 to a method of applying a composition with affirmative method steps.

3. The “[c]ycloaliphatic resin” exhibited on page 18, Example 1; line 3; Example 2, line 26 and page 19, Example 3, line 13 would be more accurately designated as a “cycloaliphatic epoxy resin” as corroborated by page 10, lines 8-12 of the specification.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor had possession of the claimed invention at the time the application was filed.

4. The specification on page 6, lines 14-15 describes a specific cure through volume (CTV) of at least 600 to 800 µm on the part and page 20, lines 19-21 discloses a CTV of from about 200 to 300 µm. There is no support for the open-ended sufficient cure through volume in independent claim 1 to allow a sufficient thickness of the composition to cure so that the composition is opaque and invisible.

Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. It is unclear what extent of cure is embraced by the "sufficient cure" denoted in claim 1, line 14. It cannot be ascertained what level of thickness is encompassed by the "sufficient thickness" in claim 1, line 15 in the absence of the specific 600 to 800  $\mu\text{m}$  recited on page 20, lines 19-21 of the specification.

Claims 1-5, 10-14 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Montgomery et al. Publication No. 2003/013487.

The rejection is maintained for the reasons of record set forth in the non-Final rejection mailed May 22, 2006. The arguments filed August 22, 2006 have been considered but are unpersuasive.

6. The claim language achieving sufficient cure through volume to allow a sufficient thickness of the composition to cure on the part such that it is opaque and invisible is the ultimate intended utility of the composition following application on a part. The claims do not require the application of the composition on a part other than claim 25 which has been withdrawn as being a distinct invention as explained in paragraph 1 hereinabove.

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7. The composition of Montgomery et al. containing the equivalent components of a UV curable urethane acrylate oligomer, dimethylacrylamide and ethyoxylated bisphenol A diacrylate combined with Crystal Violet Lactone (within the ambit of the claimed opacifying agent according to page 11, line 12 of the specification), the elected species of an iodonium salt and an aminosilane adhesion promoter inherently possesses the claimed feature of curing through a sufficient thickness to obtain an opaque and invisible cured part.

8. Although the intention of Montgomery et al. is to convert a colorless dye to a color (page 2, paragraph 15), the color does not negate the existence of opaqueness as indicated by the disclosure of an optical transmission of greater than 90% at wavelengths of from 1310-1550 nm (page 4, paragraph 48). The claims necessitate the opacifying pigment to change to a second color such that the cured product is opaque, thereby encompassing the colored, opaque cured product of Montgomery et al.

9. The newly claimed "encapsulant composition" merely portends the ultimate intended use of the composition. The formulation of Montgomery et al. employed as a recoating composition (page 8, paragraph 86) possesses the capability of performing as an encapsulant based on the equivalent components as those claimed, thereby conforming to the claimed encapsulant composition.

Claims 1-14, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over PCT Publication No. WO 03/46042 and Reardon, Jr. Patent No. 4,343,885 together and in view of Montgomery et al.

Claims 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to the claims hereinabove, and further in view of Grinevich et al. Patent No. 6,309,797.

The rejection is maintained for the reasons of record set forth in the non-Final rejection. The arguments filed August 22, 2006 have been considered but are unpersuasive.

10. The elected species of silane coupling agent of  $\gamma$ -glycidoxypropyltrimethoxy silane (page 16, line 29) used to surface-treat inorganic fillers enhances the adhesion of the inorganic filler within the composition, thereby functioning as the claimed adhesion promoter.

11. The coating of the blend of the PCT publication onto a substrate demonstrates its capability of performing as an encapsulant, thereby satisfying the claimed ultimate intended use.

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12. The claims merely require a composition comprising a UV curable component, a UV cure initiator and an opacifying component. Reardon, Jr. reports a UV-curable epoxy compound (col. 10, lines 43-54, a UV cure initiator (col. 13, lines 21-25), a fluoran colorformer (col. 2, lines 54-56, deemed to be a suitable species of opacifying pigment according to page 8, lines 15-19 of the specification) and an adhesion promoter (col. 23, line 39). The fluoran darkens or becomes more intensely colored upon exposure to actinic radiation. However, there is no indication that there is no opaqueness upon the institution of the color change. The specification on page 7, lines 4-5 allows for the retention of opaqueness even with a dark color change to a dark blue or black.

13. The composition of the Reardon, Jr. can be utilized as a coating (col. 24, lines 5-6), thereby exhibiting the capability of functioning as an encapsulant.

14. The claim language achieving sufficient cure through volume to allow a sufficient thickness of the composition to cure on the part such that it is opaque and invisible is the ultimate intended utility of the composition following application on a part. The claims do not require the application of the composition on a part other than claim 25 which has been withdrawn as being a distinct invention as explained in paragraph 1 hereinabove.

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15. The composition of Reardon, Jr. is not limited solely to the preparation of a photoresist film. Column 24, lines 5-6 sets forth its use as a coating composition, thereby residing within the field of applicant's endeavor as an encapsulant since both a coating and encapsulant is intended to provide a covering over a substrate.

Accordingly, Reardon, Jr. is analogous art since it is within the field of applicant's endeavor as required by MPEP § 2141.01(a), "Analogous and Nonanalogous Art,

I. To Rely on a Reference Under 35 U.S.C. 103, It Must be Analogous Prior Art."

16. Grinevich et al. is relied upon as a secondary reference and need not recite each and every claimed component. However, its disclosure of an epoxy monomer (col. 5, lines 34-64), a color precursor, an iodonium salt initiator and color oxidizer (col. 4, lines 43-49), and a thioxanthone photoinitiator (col. 7, lines 19-21 and 25) is sufficiently resembles the PCT publication and Reardon, Jr. so as to provide a basis for their combination. It would have been obvious to incorporate the thioxanthone of Grinevich et al. into the formulations of Montgomery et al. and Reardon, Jr. in order to enhance the curability.

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grinevich et al., Ren et al. Patent No. 5,942,554 and Japanese Patent Nos. 1-16802, 4-45125 and 60-72961 in view of Montgomery et al. and Reardon, Jr.

The rejection is maintained for the reasons of record set forth on pages 7-8, paragraphs 13-17 of the non-Final rejection. No arguments have been submitted contesting this rejection.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Sellers whose telephone number is (571) 272-1093. The examiner can normally be reached on Monday to Friday from 9:30 to 6:00. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).



Robert Sellers  
Primary Examiner  
Art Unit 1712

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8/29/2006